

# FEDERAL EMS UPDATE

NATIONAL ENERGY TECHNOLOGY LABORATORY

## Letter From the Publisher

Dear Colleague:

Since its creation in 1977, the U.S. Department of Energy (DOE) has developed numerous technologies, applications and innovations that have made substantial contributions to the future of our nation. The DOE and the National Energy Technology Laboratory (NETL) are working to overcome these new challenges and help the Department meet its mission to support continued leadership in the environmental community.

One of the ways NETL is meeting these challenges is through the Center for Acquisition and Business Excellence (CABE), an independent federal consulting group created in 1997 as a Center of Excellence. As a leader in solving energy and environmental problems, CABE's mission is to provide a suite of proven program and project management skills, engineering skills, systems analysis capability, administrative skills, innovative contracting expertise and environmental management capabilities to federal agencies.

It is our hope that this publication, and others to follow, will bring you greater understanding and appreciation of Environmental Management Systems (EMSs) and how they can benefit your organizations. This publication will provide quarterly updates regarding EMSs and their progress and impact on federal, state, and local government stakeholders. It will also serve as an information resource on where to obtain valuable EMS information for your government facilities.

Sincerely,  
Susann M. Schreiber  
ISO 14000 Services

CABE – Your one-stop source for ISO 14000 Management Services

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## All Eyes on the Environment as Whitman Assumes Control

*Initiatives Could Include Reg-Flex, Greater Role for EMSs*

A new era of environmental protection in the United States was unanimously confirmed by the U.S. Senate Jan. 30, with former New Jersey Gov. Christine Todd Whitman taking the helm as the new administrator of the U.S. Environmental Protection Agency (EPA).

While it remains to be seen as to what the new administrator has in mind regarding the role of environmental management systems (EMSs) and ISO 14000, recent statements by the president and Administrator Whitman may shed some light on where environmental policy and protection is headed concerning voluntary initiatives and enforcement.

Whitman said that although EPA will maintain a strong federal role, the agency will provide greater flexibility to the states and to local communities to "craft solutions that meet their unique situations."

Mary McKiel, EPA's standards executive and vice chair of the Board of Directors at the American National Standards Institute, said that she believes the new administration will be "creative," knowing that command-and-control always has its place, but having "less emphasis on the bean counting of enforcement and more on cooperation." She said with that kind of approach, she and other agency officials are expecting that programs

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## News Flash...

### ISO Releases Data on Industry Sectors with Survey

The International Organization for Standardization (ISO) released a new CD-ROM that makes industry sector breakdowns of ISO 9000 and ISO 14001 certifications available on a country-by-country basis.

It is the first time that the ISO Survey of ISO 9000 and ISO 14000 Certificates is made available as an electronic product. Until now, the ISO Survey has given only worldwide, regional and national totals of certifications to ISO's quality (ISO 9000) and environmental (ISO 14000) management system standards.

The CD-ROM also includes all the information presently given in the paper version of the ISO Survey, including the table of national adoptions of ISO 9000 and ISO 14000. The CD-ROM can be purchased from ISO's national member institutes or from the ISO Central Secretariat. ■

For more information, visit this Web site: [www.iso.ch](http://www.iso.ch).

For a complete reprint of this article, please visit: <http://www.ceem.com>.

### What is ISO 14000?

ISO 14000 is a group of voluntary international standards addressing environmental management systems, environmental auditing, environmental labeling, environmental performance evaluation, and life cycle assessment. The standards were developed by the International Organization for Standardization (ISO) and are commonly referred to as the ISO 14000 series. The series provides an organization with a systematic approach to environmental management. ■

For more information on ISO 14000 series of standards, please go to its web site at: <http://www.iso.ch/>.

#### EMS Tools: What and Where?

<http://www.iso14000.net/toolboxtemplate.cfm>

<http://www.epa.gov/opptintr/acctg/rev/toc.htm>

<http://www.epa.gov/performance-track/tools/index.htm>

<http://es.epa.gov/oeca/fedfac/complian/mainintro.html>

<http://www.trst.com/gapanal.htm>

### How to Build Performance into an EMS Conformance Standard

*By Dr. Robert B. Pojasek, Pojasek & Associates*

The ISO 14001 standard is designed to make certain that an organization's environmental management system (EMS) conforms to the criteria set by the standard and measured in the conformity assessment. An organization can seek a conformity assessment through self-testing, third-party certification and/or other activities. Such an evaluation will include an examination of elements of the organization's written environmental policies and procedures, its EMS components and functionality, its records and documentation and its internal auditing system. In most cases, the conformity assessment process includes the finding of deficiencies that create the need for corrective and preventive action.

A performance standard, on the other hand, focuses on the efficiency and effectiveness of the program, not restricting its opinion to whether it conforms to the standards. Efficiency refers to the central issue of proper deployment of resources (i.e., human, financial and material) and whether these resources have been put to optimal use or whether environmental improvement could have been achieved with fewer resources (e.g., a pollution prevention program).

Effectiveness is concerned with whether the EMS has led to the achievement of the intended effects. There are two parts to the effectiveness: The question of whether the policy objectives (including the goals and objectives) have been achieved, and the question of whether the achievement of the objectives is clearly the result of the policy that was pursued. Performance can only be measured when the goals and objectives are clearly stated and quantifiable with before and after metrics.

#### EPA's Performance Track Program

An example of a performance standard can be found in the "Performance Track" program that has been developed by the U.S. Environmental Protection Agency (EPA). The purpose of this voluntary program is to recognize and encourage top environmental performers—those who go beyond the minimal regulatory requirements to attain levels of environmental performance that benefit people, communities and the environment. Organizations seeking entry into the program at the Achievement Track level—the first phase of the program—must have adopted an EMS, be committed to improving their environmental performance and be committed to public outreach

and performance reporting. This program goes beyond the EMS conformance requirements with the following requirements:

- Past evidence and future commitments of specific, measurable environmental improvements;
- Past evidence and future commitments of public outreach, including identification and response to concerns, and performance reporting; and
- A record of sustained compliance with environmental requirements, certification of current compliance and commitment to maintain compliance.

The EPA felt that ISO 14001 did not explicitly require all of these items. They also believed that quantitative measures need to demonstrate past evidence and that clear metrics should be required of all future commitments. Performance improvements must be above and beyond what is required by the law. However, EPA stopped short of requiring how these items would affect financial results or have an impact on strategic planning within the organization.

The Stewardship Track is the second phase of Performance Track and is under development. The Stewardship Track will be designed to encourage and recognize higher levels of environmental performance than those expected at the Achievement Track level. Program elements could include:

- Increased commitments to specific environmental performance goals and targets;
- A focus on environmental management and performance along the product chain through relationships with customers, suppliers and transporters;
- A greater concern with product performance throughout the life cycle; and
- A higher level of community engagement.

Robert Pojasek is president of Pojasek & Associates, a Boston-based management consulting firm specializing in risk management involving quality, safety and the environment. Dr. Pojasek is also an adjunct professor at Harvard University's School of Public Health. For more information, contact Dr. Pojasek at tel: 781-641-2422 or by e-mail: [rpojasek@spynet.com](mailto:rpojasek@spynet.com). ■

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## All Eyes on the Environment as Whitman Assumes Control

(continued from page 1)

and standards like ISO 14000 are going to be "exactly in line with where this administration is coming from."

McKiel also noted that she wouldn't be surprised to see more attention given to the National Technology Transfer and Advancement Act (NTTAA) of 1995, which requires federal agencies to consider using non-governmental standards in regulatory and procurement applications whenever possible.

McKiel also said that people shouldn't worry too much about issues being lost during the transition, and that most initiatives that began during the Clinton administration, like the Greening the Government program that requires EMSs for federal facilities, were bipartisan efforts and shouldn't be at risk. "These programs have a lot of flexibility that allows agencies to develop programs and partnerships to make it work," she said. "I think a lot of people welcome that kind of bipartisan support."



*Christie Whitman,  
EPA Administrator*

"I think that [Whitman] would certainly be a proponent of EMSs as a way to get people to look at their own operations," she offered. "But then again, I don't know what she means when she talks about voluntary efforts. We'll just have to see how that takes shape. But I would imagine that she'd be naturally inclined toward wanting to see further use of [ISO] 14001." ■

For a complete reprint of this article, please visit: <http://www.ceem.com>.

## Links between ISO 14000 and Public Policy

Many governments are encouraging implementation of ISO 14001 based on the belief that environmental management systems (EMSs) can improve environmental quality, while simultaneously minimizing industry's regulatory burdens. Government authorities are attempting to use ISO 14001 in their policy initiatives, but also are forced to compensate for its deficiencies.

Some of the key deficiencies that have been identified are:

- Misrepresentation of the meaning of ISO 14001 certification;
- Inadequate definitions of key terms, such as "pollution prevention";
- Lack of openness and transparency, as well as accountability, for results; and
- Demonstrated cases of companies certified to ISO 14001 that are in gross violation of environmental laws.

These deficiencies are not acceptable from a public interest / public policy perspective. Thus, environmental regulatory agencies try to compensate for them when EMSs are referred to in laws and policies.

One emerging application of the ISO 14001 standard is its use within voluntary, EMS-based regulatory programs. Regulatory authorities in the United States, for example, have recognized that the ISO 14001 standard alone is limited in its ability to fulfill policy objectives (whether to assure compliance, promote superior performance and environmental quality improvements or to guide government purchasing decisions).

Therefore, for organizations seeking regulatory benefits for implementing an ISO 14001 EMS in the United States, additional requirements are being imposed. State and federal agencies have begun to build public policy components around the standard, including: Environmental performance measurement and reporting; Compliance assurance and auditing programs; An emphasis on pollution prevention; and Stakeholder involvement in the design and implementation of EMSs.

The risk of national and regional differences in the manner in which ISO 14001 is integrated into public policy undermines the value of ISO 14001 for organizations that wish to derive maximum benefit from the standard.

Europe's revised Eco-Management and Audit Scheme (EMAS-2) is an example of an EMS-based policy instrument that augments the ISO 14001 management system platform with public policy elements. EMAS-2 uses ISO

14001 as the management framework, superimposing additional requirements such as employee engagement, external communication of environmental performance and government-approved third-party verification. ■

For a complete reprint of this article, please visit:  
<http://www.iso14000.net>.

## RAB and IPEP Establish Alliance for Certification Programs

In an effort to bring increased value to their stakeholders, the Institute of Professional Environmental Practice (IPEP) and the Registrar Accreditation Board (RAB) have created a strategic alliance between their environmental certification programs.

Under current schemes, IPEP offers two credentials: Qualified Environmental Professional (QEP) and the Environmental Professional Intern (EPI) designations. RAB operates a certification program for ISO 14001 environmental management systems (EMS) auditors. Under the RAB program, candidates may qualify for one of four certification grades: EMS Lead Auditor, EMS Auditor, Environmental Auditor or Environmental Provisional Auditor.

Under the new alliance, however, RAB-certified auditors will receive a 50 percent discount on the QEP application and exam fees until Sept. 1, 2001. Conversely, individuals who have earned the QEP certification are eligible for a 20 percent discount on the initial application fee for RAB certification. In addition, QEP members will automatically receive credit for the work experience and education elements required for initial RAB auditor certification.

The IPEP program is supported by seven participating organizations representing a broad spectrum of environmental associations in the United States:

- \* Air & Waste Management Association;
- \* American Academy of Environmental Engineers;
- \* American Industrial Hygiene Association;
- \* National Association for Environmental Management;
- \* National Association of Environmental Professionals;
- \* Solid Waste Association of North America; and
- \* Water Environment Federation. ■

For more information, visit this Web site: [www.rabnet.com](http://www.rabnet.com).  
For a complete reprint of this article, please visit:  
<http://www.ceem.com>.

## FEDERAL FIELD NOTES

### EPA's Study of Registration Process Back on Track

The National Association of Public Administration's (NAPA) study of the ISO 14001 registration process was revitalized with the naming of a new principal researcher. NAPA, in consultation with the U.S. Environmental Protection Agency (EPA), identified Janice Mazurek as the new principal researcher for the project. She is working under contract with NAPA and has extensive experience researching environmental management systems (EMSs) and similar types of programs.

The study is designed to examine whether the third-party verification system actually strengthens an organization's environmental performance. ■

For more information, contact Jim Horne from the US EPA at tel: 202-260-5802.

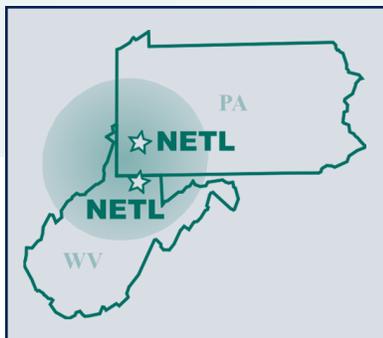
For a complete reprint of this article, please visit:  
<http://www.iso14000.net>.

### NETL Conducts EMS Gap-Analysis

The National Energy Technology Laboratory (NETL) is self-certified to DOE's Integrated Safety Management (ISM) system. Looking to strengthen its environmental arm in their ISM system and to meet Executive Order 13148 requirements, NETL conducted a gap-analysis in January, 2001. The gap-analysis used the criteria from both the EPA's Code of Environmental Management Principles for Federal Agencies (CEMP) and ISO 14001 Environmental Management System (EMS) Standard for comparison against NETL's ISM system.

The results of their gap-analysis showed NETL's ISM system to have met or exceeded many of the CEMP/ISO EMS criteria. Overall the NETL ISM system conformed to 70-80% of the CEMP/ISO EMS criteria. ■

For more information contact Jan Wachter at [jan.wachter@netl.doe.gov](mailto:jan.wachter@netl.doe.gov)



## STATE FIELD NOTES

### Multi-State Working Group Continues Public Policy Question

#### *Group Also Seeks Ways to Link Similar Initiatives in EMS World*

Environmental Management Systems (EMSs) increasingly are factors in environmental laws, regulatory policies and public policy application. So the Multi-State Working Group (MSWG) on EMSs spent much of its December meeting here discussing what to do about it and, coincidentally, about its own future.

While no final decisions were made, the discussions produced preliminary direction in four key areas:

- Public Policy EMS
- EMS verification
- Performance reporting
- Mission statement

Based on work to date, MSWG may adopt positions on public policy EMSs and EMS registrars as soon as its March 26-27, 2001 meeting in Minneapolis. MSWG's state representatives now say these two categories are the most important as they evaluate the place of EMSs in regulatory innovation programs and as legislatures return to consider new regulatory policies. Business participants in MSWG strongly echoed that feeling, stating the need for EMSs and EMS verification that have credibility with citizens-especially environmentalists-and standing with government.

Both sides note that the U.S. Environmental Protection Agency's (EPA) Performance Track Program has heightened the pressure for state-federal government alignment on EMS policies that qualify them for alternative regulatory tracks and special recognition that brands their products or services. And some organizations are telling regulators that they are not getting the credibility they need to sell EMSs internally either from existing government EMS policies or the registration process. ■

For more information, visit the MSWG Web site:  
[www.mswg.org](http://www.mswg.org).

For a complete reprint of this article, please visit:  
<http://www.ceem.com>.

## STATE FIELD NOTES

### The Second Government EMS Initiative

Due to the overwhelming success of the first program and local governments' growing interest in EMSs, U.S. EPA decided to conduct a second EMS initiative to gather additional data about the value of EMS tools in government organizations. The Global Environment & Technology Foundation (GETF) was again selected to lead the effort, providing in-depth training, coaching and on-site technical assistance to help participants design and implement their EMSs.

During the two-year project, participants will attend five comprehensive workshops. At each they receive training, materials, and technical assistance to help them accomplish EMS milestones in each of the four implementation phases. The kick-off workshop was held in Scottsdale, AZ in April 2000. Participants were introduced to the project and each other and learned how to get the EMS started in their respective organizations. Topics addressed in Phase I included: Collecting baseline data; training an EMS implementation team; Securing top management involvement; Establishing communication with external stakeholders; Conducting a gap analysis; and Developing process maps for their "fenceline" operations.

In September 2000, the participants entered Phase II – Planning the EMS with a workshop in Seattle, WA. Training was provided on developing an environmental policy; identifying significant environmental aspects; establishing EMS documentation and document control practices; developing procedures for identifying legal and other requirements; and establishing objectives and targets. A number of additional work-sessions have been added at participants' requests: presentations by the U.S. Department of Energy's Energy Efficiency/Renewable Energy Program on how to pursue energy efficiency and renewable energy opportunities; a discussion about the Natural Step Program and comparing and contrasting it with EMS; and a presentation by U.S. EPA on its Performance Track program. ■

The Phase III workshop will be held in February 2001 in Ft. Myers, FL and provides training and materials to help participants establish environmental management programs to achieve their objectives and targets and control their significant aspects.

Phase IV will be on monitoring and measuring (meeting date and location to be determined), and will prepare participants to track progress toward achieving objectives; ensure that proper checking and corrective action elements are in place for internal auditing and management reviews. The final workshop will provide case study information about benefits, barriers, keys to success and lessons learned, all of which will be compiled into an EMS Guidance Document for Government Entities. ■

For more information on the Local Government EMS Initiative please visit: <http://www.getf.org/projects/muni.cfm> for regular updates

For a complete reprint of this article, please visit: <http://www.iso14000.net>.

## MASSACHUSETTS

### Will Environmental Management Systems Replace TUR Planning?

Following a decade of toxics reduction planning-and re-planning-under Massachusetts' Toxics Use

Reduction Act (TURA), stakeholders during the past year engaged in lengthy discussions as to whether continued reductions of toxic chemical usage can be expected under that law's current formulation.

Industry voiced concern that the "low-hanging fruit" of toxics use reduction have been so fully harvested that only the least technically- or economically-feasible TUR options remain. Implementation of these options, they worry, will not result in a repeat of the success realized during the program's early years.

Recognizing these concerns, the Massachusetts Executive Office of Environmental Affairs' (EOEA's) has

proposed altering TURA so that, among other changes, companies could implement an Environmental

Management System (EMS) in place of their current planning update requirements. A demonstration project, described below, is underway to test the benefits of such an approach. The following article has been published in the February 2001 Massachusetts EnvironManagement Report.

For more information and for a complete reprint of this article, visit: <http://www.capaccio.com/JoeCorner/index.htm>

## NEW HAMPSHIRE

### MSWG to Explore EMS Integrity for Public Policy Group Could Recommend Parallel Registration Scheme for States

The Multi-State Working Group (MSWG) on Environmental Management Systems (EMSs) is exploring the needs of government and public interest groups in EMS standards and standard verification.

The result will be a gap analysis of public and private EMS needs and an analysis of whether the existing scope of EMS registration and verification meets public policy needs. Depending upon MSWG's conclusions, state governments, industry groups, environmental groups, trading blocks and the federal government could be encouraged to act independently or in partnerships.

The process of differentiating private from public EMSs began with MSWG's meeting Sept. 25-26, 2000 in Manchester, N.H. A panel involving business, environmental and auditing interests was convened "to determine whether the existing system [of registrars and registration] can serve public policy needs."

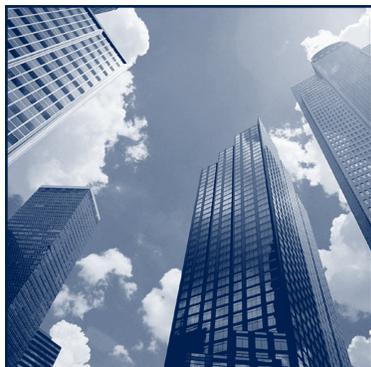
The New Hampshire panel brings into focus two MSWG initiatives:

1. Developing a public policy EMS framework; and
2. Reviewing the integrity of registrars and the registration process.

Beth Graves, chair of MSWG's task team on registrars and the registration process, said RAB has been invited to participate on the panel. She also said that the panel would include two New England environmentalists, a representative of the chemical industry and an alternative auditor certification service. ■

For information on MSWG's New Hampshire meeting or other meetings, visits the MSWG Web site: [www.mswg.org](http://www.mswg.org).

For a complete reprint of this article, please visit: <http://www.ceem.com>.



The Multi-State Working Group on Environmental Management Systems offers its expertise on external environmental communications to governments, and other public, private and non-governmental parties worldwide that are working to enhance the value of the ISO 14000 series standards.

Since its inception, the MSWG has been interested in the design and implementation of environmental management systems that meet external environmental communication needs of various stakeholder groups. The MSWG believes it can add value to the activities of ISO on this matter for the following reasons. ■

For information on MSWG, visit their Web site at: [www.mswg.org](http://www.mswg.org).

For a complete reprint of this article, please visit: <http://www.iso14000.net>.

## UPCOMING EVENTS / CONFERENCES:

- **The Environmental Health and Safety Auditing Roundtable's (EAR)** will be holding its 2001 winter conference in New Orleans March 13-15, with the topic of EHS organization and integration being the central theme of the meeting. ■

For more information, visit: [www.auditear.org](http://www.auditear.org).

- **Fourth Tri-Service Environmental Technology Symposium**  
San Diego, California  
June 18-20, 2001 ■

For more information, visit: [www.ets-2001.com](http://www.ets-2001.com).

- **The MSWGs next meeting will focus on public policy EMSs, registrar policy, finalizing 2001 workshop plans and strategic considerations for federal legislation.** ■

Multi-State Working Group (MSWG)

March 26-27, 2001

Minneapolis, Minnesota ■

For more information, visit: [www.mswg.org](http://www.mswg.org).

- The National Defense Industrial Association (NDIA) will be holding the **27th Environmental Symposium and Exhibition** in Austin, Texas April 23-20, 2001. ■

For more information visit: [www.NDIA.org](http://www.NDIA.org).

- **Learning Together 2001**

June 4-5, 2001

Philadelphia, Pennsylvania ■

For more information visit:

[www.iwrc.org/mswgroot/lt2001/teaser.htm](http://www.iwrc.org/mswgroot/lt2001/teaser.htm)

### READER CONTRIBUTION

In an effort to open the forum for government departments, agencies, and NGO organization NETL opens the EMS NEWSLETTER to its reader. NETL's commitment is to publish reader articles that present alternate views and approaches to the issues of EMS implementation and the results of those implementation. It is NETL's premise that sharing information in an open forum will stimulate effective implementation strategies and provide lessons learned from others' experiences.

### IN THE NEXT ISSUE

- Air Force Update
- Air National Guard ESOH Management System
- National Energy Technology Lab's EMS Efforts

DISCLAIMER: The "Air Force ESOH Management System", The "Colorado is Approved for EMS", and the "DoD's Approval of Executive Order 13148" articles were not included in this issue due to conflicts in schedules with DoD, Air Force and Colorado staff. We regret any inconvenience this may have caused. All three articles are planned for future Federal EMS Updates.

States Considering or Promoting EMS's in Their Approaches to Regulatory Compliance

State	MSWG Member	Legislation in Place	Pilot Projects	Tiered Program	ISO 14001 Top tier	Incentives					State	MSWG Member	Legislation in Place	Pilot Projects	Tiered Program	ISO 14001 Top tier	Incentives				
						Permitting	Reduced Inspections	Penalty Reduction	Public Recognition	Training/Technical & Financial Assistance							Permitting	Reduced Inspections	Penalty Reduction	Public Recognition	Training/Technical & Financial Assistance
ALASKA				♦	♦		♦		♦		NEW HAMPSHIRE			♦					♦	♦	
ARIZONA	♦		♦					♦	♦	♦	NEW JERSEY				♦		♦		♦	♦	
CALIFORNIA	♦	♦	♦			♦	♦			♦	NEW MEXICO				♦				♦	♦	
COLORADO		♦				♦	♦			♦	NEW YORK			♦						♦	
CONNECTICUT		♦	♦		♦	♦		♦	♦	♦	NORTH CAROLINA	♦		♦						♦	
DELAWARE								♦		♦	OHIO									♦	
ILLINOIS	♦	♦	♦			♦			♦	♦	OREGON	♦	♦			♦			♦	♦	
INDIANA			♦	♦		♦			♦	♦	PENNSYLVANIA	♦		♦					♦	♦	
IOWA	♦									♦	RHODE ISLAND									♦	
KANSAS		♦						♦		♦	SOUTH CAROLINA					♦	♦		♦	♦	
KENTUCKY										♦	TEXAS	♦			♦				♦	♦	
MAINE		♦	♦		♦				♦	♦	VERMONT			♦		♦				♦	
MASSACHUSETTS	♦		♦						♦	♦	VIRGINIA				♦	♦			♦	♦	
MICHIGAN						♦			♦	♦	WASHINGTON					♦				♦	
MINNESOTA	♦		♦								WISCONSIN	♦	♦	♦	♦	♦				♦	
NEBRASKA		♦																			

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